

REMARKS/ARGUMENTS

The Office action dated May 3, 2005, and the references cited therein have been carefully reviewed.

As a result of the Office action, a number of objections as to the use of the trademark CATERPILLAR and other typographical errors have been raised in connection with the specification, all of which have been addressed by the above amendments. No new matter has been added.

Moreover, claims 6 and 7 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite, which indefiniteness rejections are believed to have been overcome by the above amendments.

Claims 1, 3, 6, and 7 have been rejected under 35 U.S.C. 102(e) as being anticipated by Peterson. Moreover, claims 2, 3, and 5 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Kuriya. Claims 8, 9, 11, 12, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama in view of Kuriya. And claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama in view of Kuriya, and further in view of JP55-119572. These references have been carefully reviewed but are not believed to show or suggest Applicant's claimed invention in any manner. Reconsideration and allowance of the pending claims is therefore respectfully requested in view of the following remarks.

As the examiner is aware, the claimed invention is directed toward a reinforcing cable for an endless track having a flexible endless belt made of an elastomer, the reinforcing cable comprising a plurality of strands 32, each formed from steel filaments and arranged so as to be wound in a helix in the thickness of the belt. Each strand comprises a core composed of at least three filaments 34, an intermediate layer composed of a plurality of filaments 36 and surrounding the core, and an outer layer composed of a plurality of filaments 38 and surrounding the intermediate layer. Thus, as best seen in Figure 2, each strand 32 is composed of three superposed layers: an inner layer or core composed of the filaments 34, an intermediate layer composed of filaments 36, and an outer layer composed of filaments 38, wherein, preferably all the filaments are identical. Therefore, the reinforcing cable of the claimed invention comprises a plurality of such strands 32.

For example, in the embodiment illustrated in Fig. 3, the cable 30 comprises an assembly of seven strands 32, all of which are identical to one another. Each strand 32 comprises a central strand 32C surrounded by six peripheral strands 32P.

Moreover, as the examiner is aware, such three-layer structure provides for a greater longitudinal flexibility while maintaining the advantages of having high tensile strength, a better fatigue strength because of a large number of strands of which it is made from, and better penetration of the elastomer material when the cable is embedded in the endless belt during its manufacture (see

pages 5 and 6 of the specification).

According to MPEP 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Moreover, according to MPEP 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.

Peterson discloses and teaches an endless elastomeric track with corrosion resistant cables wherein each strand of the cable comprises only two layers. As best seen in Fig. 4 of the Peterson reference, the cable 59 has a central core having three filaments 61 wrapped by six filaments 62. (See also col. 4, lines 37-53).

The core 60 is wrapped around with an outer sheath comprised of six strands 70 of wire having a sheath core 71 wrapped by six outer filaments 72. In other words, each of the peripheral strands 70 comprises only two layers: a central layer composed of one filament 711 and a peripheral layer composed of six outer filaments 72. Thus, the central core has only two layers and each of the strands 70 also has two layers. Therefore, in view of foregoing, it is respectfully submitted that claim 1 is not anticipated by Peterson.

With respect to claim 3, it requires that the filaments 34 of the core, the filaments 36 of the intermediate layer and the filaments of 38 of the outer layer all have the same diameter. Peterson does not teach such configuration. In fact, Peterson

requires that each strand have two layers, the filaments 61 are 0.35 mm in diameter while the filaments 62 are 0.63 mm in diameter. Also, the sheath core 71 has a diameter of 0.63 mm while the outer filaments 72 have a diameter of 0.57 mm.

Similarly, Peterson does not teach the filaments 34, 36, 38 each have a diameter between 0.2 to 0.3 mm, as required by claim 6.

As to claim 7, it requires the cable 30 having a diameter between 4 to 6 mm. Although Peterson discloses an overall diameter of about 5.3 mm (col. 4, lines 52-54), this diameter is obtained by a different structure. The examiner also refers to claim 4 and notes that the central bundle of strand 60 of the Peterson is surround by six strands, namely strands 70. However, as stated in connection with claim 1, claim 4 is also believed to be allowable over Peterson for those same reasons.

As to claim 2, Applicants respectfully submit that Kuriya does not address the shortcomings of the Peterson reference as stated hereinabove. Peterson discloses that each strand merely comprises two layers. There is no suggestion or motivation to increase the number of layers "to provide good resistance to elongation" as stated by the examiner. The examiner has also taken a position that Kuriya does not specifically disclose the cable being used in an endless track and asserts that an endless track can be considered to be an industrial belt. However, Applicant respectfully disagrees with this assertion and respectfully states that Kuriya relates to the reinforcement of rubber articles such as pneumatic tires,

industrial belts, and the like. The use of such cables for reinforcement of endless tracks is neither mentioned nor suggested by Kuriya. The particular characteristics required by a cable for an endless track are not compatible with those required by an industrial belt or a pneumatic tire.


With respect to Katayama, the examiner has taken a position that Katayama discloses an endless track comprising an elastomeric belt and a plurality of cables, the cables comprising longitudinal cables 7 and layers of lateral cables 8 which have different widths (Figures 2 and 5). The examiner has also taken a position that Kuriya teaches a structure for a cable comprising a first core 2 of three filaments, a second intermediate layer 4, and an outer layer 6, and that it would have been obvious for the cables of Katayama to comprise multiple layers of filaments as this would provide a strong and suitable cable for the track. However, the examiner has not provided any legally tenable suggestion or motivation to combine the teachings of the two references.

Moreover, Applicants respectfully submit that Kuriya is non-analogous art and related to a different technical field as Katayama, therefore, a person of ordinary skill in the art would not be looking to that reference for the teachings examiner is referring to in the Office action. Therefore, in view of foregoing, it is respectfully submitted that claim 8 and its dependent claims are patentable over the prior art combination.

Each issue raised in the Office action dated May 3, 2005, has

been addressed and it is believed that claims 1-14 are in condition for allowance. Wherefore, Applicant respectfully requests a timely Notice of Allowance be issued in this case.

Respectfully submitted,
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